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## AN ARCHAEOLOGICAL TOUR THROUGH SICILY WITH A CAMERA

OETHE once said: "To know Europe one must know Italy; to know Italy one must know Sicily; Italy, without Sicily, leaves no image in the soul; Sicily is the key to all." If this be true it must also be true that a very small proportion of the multitudes that annually visit Europe do not really "know Europe," for so few, comparatively speaking, go to Sicily. Reasons for this have not been hard to find. For, while it has been known that the island of Sicily is "the pearl of the Mediterranean," it has also been known as the land of "earthquakes, brigands, and social disorders." These have appeared as sufficient reasons why most people should stay away. However, through efforts put forth in the last few years by public officials, railroad managers, and hotel keepers, most of the evils, other than those which nature herself threatens, have been done away with. The manifold interests in the island, because of its strange history, its wonderful ruins of by-gone ages, the strange customs and costumes not to be found even in southern Italy—all this combined with a most charming climate and wonderful scenery, makes it a land easily worth the time and money which a tour of the island

A tour of Sicily should not be made without at least having an outline of its history in mind. It has been said that this little land has

been "The Checker-board of the Nations." Let us see. Away back in what is conveniently called the pre-historic times we find legends of Cyclopes, Gigantes, Lotophagi, Læstrygones, and other monsters that were supposed to roam over the island with heads touching the clouds and pine-tree trunks guiding their footsteps as walking sticks. Getting a little closer to facts there are named two races of early peoples, known as the Sikels and Sicans, that settled in different strategic points. Meagre remains of these early settlements have been excavated and more or less pottery found. These people we may date by saying that they were earlier than 1500 B. C. The Greeks came in 735 B. C., and settled in Syracuse. During the time of their supremacy cruel tyrants rose and fell. Phaleras, Dionysius, Theron, Gelon, Hiero, and others, ruled in different cities, and practised their cruel-During all this time the Phœnicians came again and again to this part, and then to that, conquering and being conquered. splendid ruins of temples and theaters to be seen at Selinus, Girgenti, Syracuse, and elsewhere, belong to the Greek period.

Then there is the Roman period. And we can not think of this without being reminded of the fact that these Roman governors were wicked and did much to pull down and retard progress. Servile wars

followed in the years 132 and again in 103 B. C.

The Saracen period began about 827 A. D. The Mohammedans took Palermo and Syracuse and flourished most during the latter half of the X century. In the middle of the XI century came the Normans, represented by Robert and Roger of Normandy.

The next period was that of Charles of Anjou and Peter of Ara-

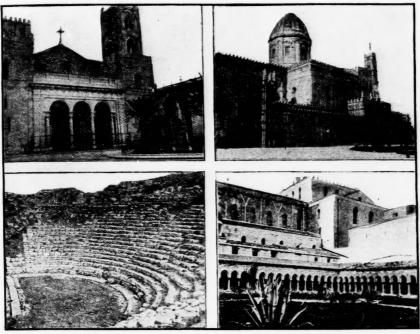
gon, that is of the French and the Spaniards.

Not till the year 1848 did Sicily become free under Ruggiero Settimo, and it was only 12 years later that Garibaldi landed in the extreme western part of the island, and, after a few successful engagements, united it to Italy in 1860 as the United Kingdom of Italy. These historic bones are indeed dry, but so much at least we need to have in mind before we begin our journey, or we can not at all understand the significance of many things that we shall see. With these things in mind we readily see the force of the expressions, "The Checker-board of the Nations" and "The Archæological Museum of Europe."

There are two ways of reaching the island. One is to take the splendid train that runs down from the north twice a week and cross by ferry from Italy to Messina. The other, in some ways preferable, is to take the mail steamer that leaves Naples every night at 7 and reaches the harbor of Palermo about the same hour the following

morning.

Messina does not offer much that is interesting. The site is one of the earliest built upon, but the present city has been erected since 1848, with only here and there a trace of earlier periods The Cathedral was founded by Count Roger in 1098, and has an interesting



MONREALE CATHEDRAL [FIG. 3] THEATER AT SEGESTA [FIG. 5]

PALERMO CATHEDRAL [FIG. I] CLOISTERS OF MONREALE [FIG. 4]

doorway. The strait between the island at this point, and Italy, is where the monsters of olden times were located, namely Scylla and Charybdis. These forces of nature, a rock on one side and a strong whirlpool on the other, caused many a shipwreck, and it required but little imagination to fancy that living creatures were there to entice the foolish sailors into their power. The modern town as the center of the Messina lemon trade, which includes the whole island, is surprisingly active during the harvest of this "gold of Sicily."

The rail route from Messina to Palermo passes through Cefalu, an old Greek site known as Cephalædium, now noted for its cathedral, which, ugly on the exterior, contains within, on its walls and ceiling, the finest and best preserved mosaics in the world. We do not except even those of St. Mark's. The cathedral was vowed by Roger II, who, on his return from Naples to Palermo, was overtaken by a great storm and vowed a cathedral to Christ and the Apostles on the spot where he should land. The representations in mosaics of the Master and His followers over the great altar of this early date, soon after 1129, are wonderful examples of the art of that period.

Palermo is the capital city and is rightly named "La Bianca," the White City. While there is not enough of the early days to detain the

traveler long, yet it is a spot in which one likes to tarry even after he "has done" the city. The palace, finer than that at Rome, the Cappella Palatina, a perfect gem of medieval art, built in 1132, by Roger II, and perhaps the most beautiful palace-chapel in the world, with its wonderful mosaics and woodwork, the remains of Spanish rule; the cathedral, busy streets, etc.—all make it hard to be satisfied with a brief visit.

The cathedral, without its modern Italian dome, is beautiful on the exterior. [Figs. 1 and 2.] Then there is the ruin known as S. Giovanni degli Eremiti, a very early Norman church, founded in 1132, in what was originally a mosque. Here is to be found the old guard who served under Garibaldi, Sicily's Abraham Lincoln. He tells his story with wonderfully impelling pathos, shows his wounds, and shouts "Viva Garibaldi! Viva Italia!" and then before you can catch your thoughts, shouts again, "Viva Lincoln!" and before you are really aware of it you are joining him in hurrals for both these great emancipators. Palermo has the largest theater in Italy, and another beautiful one called the Garibaldi Theater. Here you see the splendid public gardens of which Goethe said in 1789: "It is the most wonderful place in the world." On the streets everywhere are to be found many things that are odd, many that are comical, not a few that are pathetic. Not the least interesting are the gorgeously painted twowheeled carts, that have painted upon their sides scenes that range from the Old Testament stories clear down to the horrors of a dissecting table. Several excursions can be made from Palermo, notably to Monreale, where is to be seen another great cathedral with walls covered with more than 70,000 square feet of mosaics. [Figs. 3] and 4.]

It is a mistake to turn back to the eastern part of the island after finishing Palermo. The grandest and most stupendous ruins of Greek temples to be found in the world are in the western end. not fail to visit Segesta and Selinus. Segesta can be easily reached by taking a train that runs to Trapani. While a walk or drive of about 4 miles is necessary after reaching the station of Catalifimi, yet even the first impression that one receives upon rounding the last bend in the path, when that superb old Greek temple of the V century B. C. comes into sight, easily repays all the cost of the climb. Segesta, according to a Roman tradition, was founded by followers of Æneas, after their return from Troy. On one hill is the temple [Fig. 21], which had never been completed, facing the East, as was always the case, while on another hill a little higher was the town and the splendid theater. [Fig. 5.] No words are adequate to fitly describe these No wonder that those old Greeks did not feel the need of painted scenery. As one sits in the seats, still for the most part intact, and looks down upon the orchestra and stage, he has before his constant view a panorama of color that needs not the painter's brush to beautify. The browns and pinks of natural soil and rock are dotted SICILY

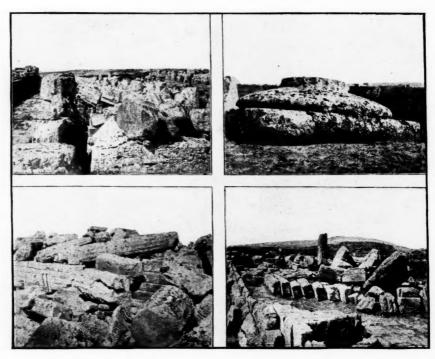


TEMPLE AT SEGESTA [FIG. 21]

here and there by the varied shades of green furnished by vineyard and olive. Above and around it all is the wonderful blue of the Sicilian sky, while across the scene now and then floats a bit of white cloud.

To visit the ruins of Selinus it is necessary to spend a night at Castlevetrano. Here carriages may be had for the 7 mile drive to the site of the ancient city. Selinus was founded in 628 B. C. It was the most westernly settlement of the Hellenes. On a hill, only 154 ft. above the sea, was the acropolis, which was completely surrounded by a great wall with bastions on the corners. Within this walled enclosure were 5 great temples, now known as temples O, A, B, C, D. The people of Selinus and Segesta found it hard to live at peace. Their dissensions gave the Athenians, in 415 B. C., and the Carthaginians, 6 years later, a pretext for interfering in the affairs of Sicily. Hannibal, as an ally of Segesta, attacked the town with 100,000 men. Help from Syracuse came too late; 16,000 inhabitants were put to the sword and 5,000 were carried off to Africa as captives. From this blow Selinus never recovered.

The temples within this acropolis enclosure are among the oldest known, and the sculptures which have been found there, now preserved in the museum at Palermo, are of especial value, for they show the progress of the sculptor's art at this very early age. The well-known reliefs of Perseus slaving the Medusa, and Hercules carrying



TEMPLE RUINS AT SELINUS [FIG. 8]

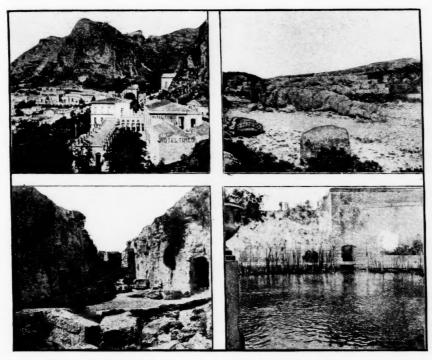
CAPITAL OF COLUMN, TEMPLE G
AT SELINUS [FIG. 10]
TEMPLE OF HERCULES AT
GIRGENTI [FIG. 11]

TEMPLE C AT SELINUS [FIG. 6]

off the Cercopes are among the metopes found in excavating temple C. [Figs. 6, 7, and 8.] About half a mile from the acropolis are the ruins of 3 other temples, called for convenience E, F, and G. Temple G [Fig. 9] is one of the largest temples ever built by the Greeks, and dates from the second half of the VI century. Its length was 371 ft., width 177 ft., and the columns were 54 ft. high. These great drums were quarried at Campobello, about 6 miles away. Unfinished drums can still be seen there, while still others are seen by the wayside, which were being transported at the time of the fall of the city. One little capital [Fig. 10], but 13 ft. square, still lies on the ground with the ruined temple to make us question again and again how the men of that early day handled such enormous weights.

A continuation of the trip to the western end brings us to Marsala, the ancient fortress of the Carthaginians, Lilybæum, and then to Trapani, which the Greeks and Romans knew as Drepanum. Drepanum stood at the foot of Mt. Eryx. Here the Trojans, under Æneas, celebrated games in honor of Anchises, the hero's old father. Upon the summit of Eryx, just before they continued their long jour-

SICILY



TOWN OF TAORMINA [FIG. 14]

INTERIOR OF FORT EURYALUS AT
SYRACUSE [FIG. 16]

GIANT OF ZEUS AT GIRGENTI

[FIG. 13]

FOUNT OF ARETHUSA AT

SYRACUSE [FIG. 15]

ney toward the spot where they should make the beginnings of the Roman city and race, they dedicated a temple to Venus, their patron goddess. It is said that long before this time there was a temple that had been dedicated to Astarte, the Phœnician goddess, corresponding to Baal. Later came the Greeks and rebuilt the temple in honor of Aphrodite. Then the Romans consecrated it to Venus, the mother of Æneas, while at the present time there is to be seen on the same spot a church to the Madonna of all the Graces.

So we see how, in the lapse of many ages, priestesses of Astarte became the priestesses of Aphrodite, then of Venus, and now are a sisterhood of holy nuns.

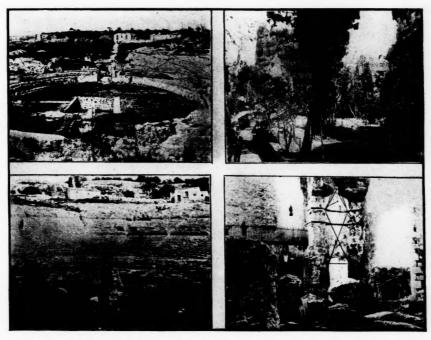
To reach Girgenti, which is on the south coast, about in the center, it is necessary to retrace one's steps clear back to Palermo and start from there anew. This city, called by the Greeks, Acragas, by the Romans Agrigentum, to-day Girgenti, the old-Greek, Pindar, said is "the most beautiful city of mortals." It was founded as early as 582 B. C. Various tyrants ruled here, among the number Phaleras

of brazen bull fame. The temple area was unusually large and was situated between the acropolis and the sea. It is known that the city was very powerful at one time, with a population variously estimated at from 200,000 to 800,000. Like many other Sicilian cities it yielded to the power of Carthage and was largely destroyed by Hamilco in B. C. 416. The splendid temples were largely destroyed at that time, but even so, the remains are among the finest in existence to-day. Not in Greece can finer ruins be found. With one possible exception, in the Theseum at Athens, no Greek temple is so finely preserved as that known as the Temple of Concord. This and the temple of Juno, of Hercules [Fig. 11], of Castor, and Pollux [Fig. 12], and others, all date from the IV to the VI centuries B. C. Besides these there is the Zeus temple, which is the second largest ever built by the Greeks. Only that famous Diana temple at Ephesus exceeds its dimensions. Its exterior was 372 ft. by 182 ft., with great columns over 55 ft. high. There were 38 of these huge engaged columns, but of the whole structure very little remains on the site. One thing of special interest is a great stone giant 25 ft. high [Fig. 13], which still lies upon the ground. He, with 37 of his brothers, at one time served to uphold

some portion of the roof of this enormous temple.

From Girgenti one naturally turns his face seriously to the eastern coast, and as he does so passes through the sulphur regions, a product which rivals the lemon for the proud title of "gold of Sicily." Methods of mining are primitive in the extreme. Much of the sulphur is brought out from the earth by young boys, who have a pale, gaunt look, which indicates what is all too true—short existence. Yet, in spite of reckless waste and crude methods, in 1900 nearly 600,000 tons, valued at \$9,500,000, were taken from the earth and marketed. The journey from Girgenti to the eastern shore may very profitably be broken by spending a night at Enna. This was the ancient name of Castrogiovanni, the place called the umbilicus, or navel, of Sicily. The little town is perched high upon a hill, more than 2,600 ft. up, and to-day gives no evidence of the fact that it was once supposed to be in the very midst of plenty. The goddess of the harvest, Ceres, was worshipped here. Very close to this spot was where Pluto was said to have carried off Ceres' daughter, Proserpina. Milton has sung, "That fair land of Enna, where Proserpina gathering flowers, herself a fairer flower, by gloomy Dis was gathered, that cost Ceres all that pain to seek her through the world." There is no evidence, as I have said, in the present town of plenty. Its inhabitants seem pinched and hungry, and yet on a certain anniversary day the tradition of Demeter is kept alive in their worship of the "Madonna of all the Graces," for sheaves of grain and flowers are placed before her statue in the cathedral.

One must not fail to visit Taormina. Of all the most beautiful spots which one is sure to see in such a tour, this is the most beautiful. [Fig. 14.] The town itself, snow-capped Ætna in the distance, the



ROMAN AMPHITHEATER AT SYRACUSE [FIG. 19] GREEK THEATER AT SYRACUSE [FIG. 18]

STONE-QUARRIES AT SYRACUSE
[FIG. 17]
TEMPLE OF APOLLO AT SYRACUSE
[FIG. 20]

splendid ruin of the Greek theater, and the many vistas of the glorious sea, all combine to make an attraction that ever delays thoughts of departure.

Catania, the city which lies "beneath Ætna," the tourist may hastily see as he passes southward for the last point of supreme interest.

This city has suffered much and many times from the awful baptisms of fire from the great volcano, Ætna, and it is with great difficulty that the tourist finds even traces of the theater and other buildings of early days. Out in the harbor, however, can easily be seen the great rocks that the huge, man-eating giant, Polyphemus, hurled at Ulysses and his followers as they endeavored to escape from their terrible experiences within the monster's cave.

One's first impressions of Syracuse, especially if he arrive by train, are apt to be disappointing. It is not a hill-town like Girgenti or Enna; it is not a city situated at the foot of a hill, like Trapani or Catania; nor at the foot of a high ridge, like Cephalu; nor in a great plain, like Palermo. It lies almost entirely on an island, rather flatly situated. And yet one cannot behold Syracuse unmoved. It is a city

founded 26 centuries ago by one Archias, by the fountain of Arethusa. [Fig. 15.] Arethusa was a nymph of Elis, who was loved by the river god, Alpheus. His love was not, however, reciprocated, and when the nymph appealed to the deities for aid to escape the pursuing god, she was allowed to disappear in the ground. She appeared again away off in Sicily, in the form of this beautiful fountain, having passed beneath all of the intervening salt sea. The fountain is one of fresh water, from which the sea has been shut out by dykes. The famous Roman orator, Cicero, in his masterly oration against the unjust governor, Verres, describes this city and divides it into 4 parts. In addressing the judges, he says: "Syracuse is the greatest of the Greek cities, and the most beautiful of them all. It is so, O Judges, by its situation, which is strongly fortified on every side by which vou can approach it, whether by sea or land, most beautiful to behold." gives as the 4 parts Ortygia, the Island; Achridina, Tycha, and Neapolis. There was really a fifth part, however, and one of great importance. This is Epipolæ, with its famous fort, Euryalus [Fig. 16], situated on the mainland a litte back and above the city proper, and yet as its defense should be included as a part of the city. As Syracuse had been founded by men of ancient Corinth it was a rival of Athens. It had become very powerful and in 414 B. C., Athens determined, if possible, to conquer it, and so perhaps overthrow her rival Corinth. The plan of attack was to build a great double wall from sea to sea, between the city and this fort, and so cut off the people from their fortress. The city was almost upon the point of yielding when Gylippus came to its relief with reinforcements and broke through the Athenian wall. A little later, under the famous general, Demosthenes, the Athenians made a desperate attempt to take Epipolæ by night, but were repulsed with great slaughter. Disease broke out in their camp and dissensions arose. They decided to retreat, and were so unfortunate as to choose a night in which the moon was in full eclipse. So superstitious were the people that they were thrown into a panic by this freak of nature; the Syracusans fell upon them and all but annihilated them, taking 7,000 prisoners. The great Greek historian, Thucydides, describes what followed. These 7,000 men were thrown into the stone-quarry, known as the Latomia dé Cappuccini. [Fig. 17.] This spot that to-day looks so much like a beautiful garden with its lemon, orange, and pomegranate trees, and luxuriant vines, was at that time "the Gethsemane of a nation." Here 7,000 Greeks were shut up and left to die of wounds and diseases. Here, tormented by thirst, by hunger, by heat, by cold, by poisons, "the pupils of Socrates, the admirers of Euripides, the orators of the Pnyx, the atheletes of the stadium—died like dogs." Thucydides says that for 70 days the 7,000 were kept here and treated with great cruelty, receiving each, daily, one-half pint of water and 2 of grain. A few won release by being able to recite selections from Euripides. A few were sold into slavery, but a majority died in this prison-quarry till at last there remained no



ANAPO RIVER LINED WITH PAPYRUS PLANTS [FIG. 22]

remnant of the most splendid armament of Athens but heaps of corpses, putrefying bodies of dead men. Not far from this stone-quarry are others, the most famous being known as the Ear of Dyonisius. Of the Greek period there is preserved a splendid great theater [Fig. 18], dating from the V century B. C. This is the third largest theater the Greeks ever built and had seats for some 24,000 people. Even now can be seen, carved in Greek characters, the names of old King Hiero and others of his day. Then there is the great altar of Hiero II, 645 ft. by 75 ft., on which were offered every year, upon the anniversary of the expulsion of the tyrant, Thrasybulus, 450 oxen. Of the Roman period, the time of Augustus Cæsar, we find splendid remains of an amphitheater. [Fig. 19.]

When we pass over to the island, known as Ortygia, we find few ruins. One is that of a very old and large Greek temple to Apollo [Fig. 20], or possibly Diana, but in small part excavated, and the Doric columns of the temple of Minerva, now built into the modern cathedral. This was the temple that Verres plundered, of which

Cicero writes in the oration referred to above.

The modern town has little of interest that differs from other Sicilian cities. The museum is well worth a visit and contains a

marble Venus that ranks high among such works of art.

There is one other point to visit, one little excursion to make, and our tour is over. We often ask "What did the ancients use for paper? Upon what did they write their letters and books?" Not only did they use parchment, but a paper, which was far cheaper, made from the papyrus plant. Nowhere else, except in Egypt, can it be seen

growing naturally in great luxuriance than here, near Syracuse. By crossing the large harbor one can enter the mouth of the little river Anapo, and continue up its course till the branch called the Cyane is reached. Following this, one is rowed or "poled" for a long distance between banks thickly lined with great plants 20 or more feet high [Fig. 22], until the journey at length ends in the great spring which is the source of the stream, the pool of Cyane. When Pluto carried off Proserpina, the water Nymph, Cyane protested so loudly that the king of the infernal regions drowned her in this pool, which even yet bears her name. It is a pool of azure blue, some 40 to 50 ft. deep, almost surrounded with the papyrus. Here we stop and ponder. Here we may, in a most peaceful spot, review in our minds our whole tour, and here we will be ready to assent to those splendid titles that we had in mind when we first set foot in Sicily, the Checker-board of the Nations, the Archæological Museum of Europe, the Pearl of the Mediterranean.

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#### THE BEGINNINGS OF IRON\*

ORMERLY, it was generally believed that iron was the gift of Africa to mankind, and if not of Africa, most certainly of Modern research has shown that Egypt did not use iron until about B. C. 800, that the Libyans were not using it in B. C. 480, and that the Semitic peoples did not use it from a remote past, but borrowed it comparatively late. I urged, in 1896 and in 1902, that Central Europe was the true center of the use of iron as a metal, and that it was first diffused from Noricum. At Hallstatt iron was seen coming into use first to decorate bronze, then to form the edge of cutting implements; next, it gradually replaced bronze weapons, and finally took new forms of its own. Everywhere else iron as a metal came into use per saltum. Man probably found it ready smelted by nature, as the Eskimo discovered it at Regents' Bay and at Ovifak. Some still imagine that it was used very early in Egypt, because its name occurs in early documents. But this is readily explained, since hematite was known and used very early in Egypt, and the same material was used very commonly in the Ægean long before the Bronze age. But it was treated not as a metal to be smelted, but as a stone to be ground into axes and beads.

<sup>\*</sup>EDITOR'S NOTE—At the recent meeting of the British Association at Leicester, July 31 to August 7, Professor Ridgeway read a paper on The Beginnings of Iron, which called forth considerable discussion. This is of such general interest, we here quote the abstract of Professor Ridgeway's paper and of the discussion following, as condensed in Man [London].

tians thus used the material, and had a name for it, which they continued to employ when they had learned its use as a metal from Europe. Others also cling to the belief that iron was worked in Central Asia from a remote time. But in Uganda, which was in touch with Egypt by means of the great lakes, iron, as I am informed by the Rev. J. Roscoe, became first known in the reign of a king about 19 reigns back (about 500 or 400 years ago). This renders it very unlikely that the metal was worked until very late in Central Africa. It is certain that the peoples beyond the Caspian, as well as those along the Indian Ocean, did not use iron until quite late, that India herself did not know of it at an early date, and that Japan only got it about 700 A. D., yet some still imagine that it must have been known to the Chinese from remote antiquity. But the earliest mention of iron in Chinese literature is about B. C. 400, while a bronze sword belonging to Canon Greenwell has an inscription, read by Professor Giles, which dates it between B. C. 247 and 220. There is evidence that bronze swords were being used till A. D. 100, and that it was only then that iron swords were coming in. It is now clear that the use of iron as a metal is due to Central Europe.

In the discussion which followed this paper, Professor Naville thought that a distinction must be made between the knowledge of iron and its general use, In Egypt, in the Old Empire, there were two or three cases of iron being found, but in the New Empire iron did not seem to have been commonly used. In the excavations of Deir-el-Bahari no iron tools were found. The general use of iron in

Egypt could not be traced before the Greek time.

Prof. W. M. Flinders Petrie observed that the distinction between the sporadic and the general use of material must be kept in view. Flint was used for economic purposes down to the Roman age in Egypt, although copper was known for 8,000 years before. Bronze was known by 4800 B. C., yet did not come into use till 3,000 years later. Iron was known for 4,000 years before it came into economic use. This sporadic use strongly supported Professor Ridgeway's view of the use of native iron, for had a process of reduction been invented, it was unlikely that it would have lagged for 4,000 years before its common use, whereas, native iron might be occasionally discovered and worked by man discontinuously.

Mr. Arthur Evans pointed out that the great obstacle in the way of Professor Ridgeway's view as to the diffusion of the use of iron a Noric source, was the comparatively late date of the early

Iron-age civilization of the Hallstatt area. The cemeteries of Southern Bosnia showed an earlier phase, and those of the geometrical and sub-Minoan tombs of Greece and Crete a still earlier. No doubt the general adoption of iron in the Ægean countries corresponded with the break-up of the earlier Minoan and Mycenæan type of culture, and the diffusion of an Italian and Northwestern sword type. But the translation of this type into iron probably effected itself in a southern

area.

Prof. R. C. Bosanquet observed that there was very little available evidence as to the Bronze age in Macedonia and Etrus, and even in the northern provinces of the modern kingdom of Greece. It was, therefore, impossible to test the theory that the general use of iron had made its way into Greece from the north. He described recent finds of bronze spear-heads and axes with an iron spear-butt by peasants in the northwest of the Peloponnese in a tomb with late Mycenæan vases. The presence of these axes there might be taken as evidence of trade with Italy, and the iron spear-butt, unknown elsewhere in the Ægean, might also prove of northern type. The tomb found at Muliana in Eastern Crete, had furnished evidence of the transition from inhumation to cremation, from iron to bronze, the link between the two interments in it being the pottery which in both cases was definitely late Minoan and not Geometric.

Mr. W. Crooke remarked that the evidence for the age of iron in India had not apparently been fully recognized. Excavations of South Indian interments showed iron objects side by side with bronze vases and other objects, which were possibly Babylonian. Intercourse between Babylonia and South India had been traced historically as early as 800 B. C., and probably existed from a much earlier period. Besides this, many jungle tribes manufactured iron by very primitive methods. At any rate, iron must have been in common use in the time of Xerxes, whose Indian mercenaries were armed with iron. The inference was that India might have been the scene of an early independent discovery of iron not derived from Europe or Babylonia.

Prof. J. L. Myres thought that Professor Ridgeway's argument that the knowledge of iron as useful metal spread from a center in Noricum or its neighborhood stood in no logical relation to his assumption that the question of the early iron age in Europe was that of the first use of iron at all. For it happened not infrequently that materials which had long been known as curiosities in one area were, when transfered to another area, discovered to have new utility and widely disseminated thence. Not only did iron objects occur in Egypt and the Ægean in earlier deposits than in Central Europe, but the forms of the early metal furnaces and the modes of smelting pointed to a well-defined quality in man's knowledge of iron. Egypt and the Mediterranean, with the "open-hearth" process, were restricted to a small output of iron, and used it as a rarity until the North, with its "blast-furnace" principle, produced iron in copious amount, and of a quality more suitable for cutting weapons.

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ADDITIONS TO THE MANUSCRIPTS IN THE BRITISH MUSEUM.—The last catalogue of the additions to the British Museum during the years 1900 to 1905, contains a full description of 970 manuscripts, 9,116 charters, 911 seals, and 782 papyri.



EAST WALL OF DUG HILL, MO., LOOKING SOUTH

#### A PALAEOLITHIC IMPLEMENT FROM THE LOESS

N AUGUST 24, 1907, an implement of unusual interest was found embedded in loess, undoubtedly original, and apparently previously undisturbed. It was found in an old cut known as Dug Hill, situated at the northwest limits of St. Joseph, Mo., by Mr. George Y. Hull. A laborer at the stone-quarry, some distance to the north, informed Mr. Hull that in passing through the cut that morning on the way to work he had noticed, at a point too high to reach, a small, black spot in the wall of the cut that might be some kind of implement; he had not had time for an examination. Modern implements, near the surface in that locality, are by no means rare, but, being a collector, Mr. Hull went immediately to secure what he expected to be nothing of more consequence than a flint arrowpoint. With a precarious foothold 3 ft. above the base of the perpendicular wall, and only a broken stick to work with, the find was soon observed to be of a wholly unusual kind, and so firmly embedded in the compact loess that the task of removal was extremely slow and difficult. Only a small portion of the base of the implement had been exposed to view. As work progressed it was seen to be inclined at a low angle with the point downward and resting so that one broad surface was subject to the full influence of downward percolation, while the reverse side was almost wholly protected.

For these facts, Mr. Hull is willing to vouch in a sworn affidavit, if desired. He is a lawyer and aware of the imperative value of facts

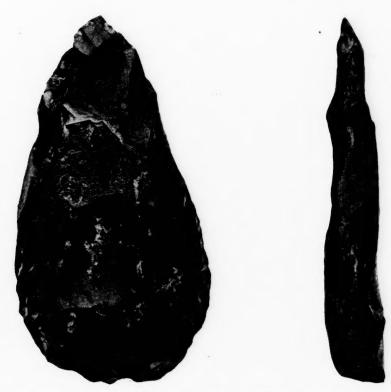
only in scientific matters. Thinking the find might possess geological

significance, he brought the relic to me for an opinion.

The exact measurements of the implement are 43% in. in length, 23% at the broadest part, and a trifle over 5% of an in. at its greatest thickness. It has been chipped from a pebble of very fine, close-grained, black trap-rock, which shows no independent crystals under a glass which magnifies 18 times. Similar pebbles are occasionally noticed in the drift of this locality. An exposure of such rock in place is known in the northern part of the Black Hills, and is mentioned among the porphyries by Prof. J. E. Todd, in his *Mineral Resources of South Dakota*, wherein he quotes from a paper by Dr. J. D. Irving, on the geology of the Hills. He says: "In this paper description is given of an eruptive rock in Bear Gulch, west of Spearfish Creek. 'It is a dense, black rock, carrying no noticeable phenocrysts, and of extremely fine grain.' This may eventually be of value to those desiring a fine, black rock for ornamental purposes."

The chipping of the implement distinctly registers its association with a period greatly antedating that of other implements common to the locality, although the workmanship is fairly good, excepting for the space of nearly an inch midway of one edge, which has been left blunt, with a flat surface almost half an inch thick interrupting the knife-edge. The cleavage is similar to that of a piece of obsidian from the Yellowstone, but the surfaces have lost the sharp lines produced by flaking, and plainly show the worn condition due to much service. The side which was uppermost during the time of burial is nearly covered with a thin crust of iron oxide in small, irregular patches deposited from the loess, while the reverse side is almost free of such deposit. No pitting can be observed by the unaided eye, but under the glass the effects of chemical action are distinctly seen.

Dug Hill is the familiar name of an old cut at the city limits on the northwest, as before stated, where the main ridge of the bluff spreads abruptly to the eastward from the river. The cut was made in the early '60s, during the war, for the purpose of easing the grade for heavy wagons hauling army supplies to a fort established by Union troops at the highest point of the bluff, overlooking both the town and river. It extends northwest-southeast in a curving line through the lowest portion of the ridge; and, although slightly deepened in recent years, the walls still show the original exposures of more than 40 years ago and their perpendicular is unimpaired. Since no levels have ever been run there by either the city or county it was necessary to engage an engineer to ascertain the desired elevations. He found the highest point of the road in the cut to be 139 7-10 ft. above high water; the highest point of the east wall, in which the implement was embedded, to be 180 ft. above high water, and the highest point of the bluff in that locality, Prospect Hill, to be 202 ft. The high-water mark used for reckoning data at St. Joseph is 812 9-10 ft. above the mean tide of the Gulf of Mexico.



IMPLEMENT FROM DUG HILL, MO. ACTUAL SIZE. VIEW OF FRONT, AND IMPERFECT EDGE

The loess exposed in this cut is not stratified, although the work of excavation has been done in a manner that gives that appearance in a photograph. The implement was embedded 10 ft. above the road at its highest portion, and a short distance beyond where the ridge begins to slope toward the north. It was not less than 20 ft. below the natural surface, but this can not be given with exactness, because it has amused small boys to make some excavations just at that portion of the hill top. This, however, is not to be regretted since the disadvantage of their work in preventing positive figures as to the depth of the implement below the natural surface is offset by the fact that in making a path to the summit, they worked in behind the wall, leaving a sort of parapet 2 ft. thick directly above the implement site. That this thin parapet continues to retain its position as firmly as if it were of solid rock is positive evidence that the deposit is original loess and previously undisturbed.

Diligent search for fossils in the main portion of the cut was rewarded only with one small, fragile Succinea obliqua, at 31 ft. above

the road on the east, and an equally imperfect *Patula alternata*, near the base of the west wall, where it seemed to have lodged when washed from a higher point, while in the base of the northern slope of the ridge we found a fine specimen of *Polygyra multilineata*, of tropical size, only 2 ft. below the black loam.

LUELLA A. OWEN.

St. Joseph, Mo.

## 4 4 4



ROMAN PORTRAIT HEAD [FIG. 6]

#### ROMAN PORTRAIT HEAD IN VASSAR COLLEGE

MONG the important antique marbles in Vassar College one of the finest is a Roman portrait head [Fig. 1], which, like the statue of a woman, belonged to the Giustiniani collection in Rome, and was presented to the college by Mrs. F. F. Thompson. The head is placed on what appears to be a Greek body [Fig. 2], seated on a chair, the copious restorations of which render a definite verdict difficult. The body itself, in the first place, is carved "in the round," but with so much foreshortening that it undoubtedly was part of a very high relief. [Fig. 3.] The excellent state of preservation of the drapery and the absence of corrosion everywhere except on the hand [Figs. 2 and 5], which is carved on the "highest" plane, show that it was protected from the inclemency of the weather. The

¹Cf. Greek Draped Figure in Vassar College, Records of the Past, Vol. VI, pp. 227, A.



PROFILE OF ROMAN PORTRAIT HEAD [FIG. 1]

hand, however, is so badly damaged, possibly by the drop of water from a roof, that it has lost every vestige of its original modelling, and to-day appears unduly broad. While it is, of course, impossible to state in what connection the original Greek body was carved, there are so many instances of similarly designed and executed bodies among the extant Greek grave reliefs, that one readily accepts the theory that this Greek once sat inside one of those shrine-like frames, which abound from the IV century B. C. It is not at all unusual in these grave reliefs to have some parts, as the hand in this case, project beyond the limits of the protecting roof.

The folds of the drapery [Fig. 2], barring those which are restored on the chair, are not only arranged with great skill, but also beautifully carved. They are conventional, to be sure, but their workmanship raises them far above the average artistic level of the grave reliefs of the IV century. Vassar College possesses here, not the work of one of the masters, but a sample of what even lesser men could do.

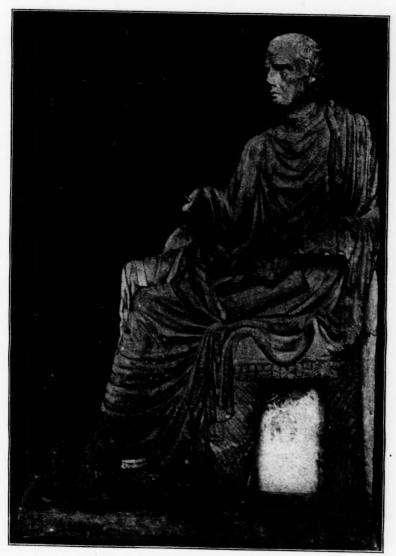
Those defects of perspective which appear in the photograph are due to faulty restorations. The block was originally tilted differently [Fig. 3], and raised to a considerable height. Experiments last win-



ROMAN PORTRAIT HEAD [FIG. 4]

ter with the block along these lines proved conclusively that the perspective for the original view of the statue was correct.

Figures 2, 3, and 4 give a clearer account of the restorations than is possible in words. The right leg of the chair is entirely new. Part of the other leg is antique, but it has been recarved to match the new leg. The fringes on the edge of the chair [Fig. 2], probably were carved at the same time. They give one the impression of machine work. Above them there once rested a projecting cushion, which undoubtedly was badly broken. The restorer, therefore, made it disappear by transforming the remaining fragments into folds and smoothing over the intervening spaces. Just when this work was done, can not be told, but a possible hint is contained in the unfinished block [Fig. 5], with its well-defined moulding which was used in the restoration. A hint, provided one succeeds in identifying it with other frag-



ROMAN STATUE AT VASSAR [FIG. 2]



ROMAN PORTRAIT HEAD [FIG. 3]

ments of datable monuments. Until that question is settled it will be doubtful whether the fine Roman head was added in antiquity or at the time when the Giustiniani collection was formed. There are many parallels for the practise of adding original Roman heads to imported Greek bodies. The Emperor Caligula, for instance, aspired to have the Olympian Zeus, by Pheidias, transferred to Rome, and to exchange the divine head of Zeus for his own degenerate portrait.

On the other hand, the Vassar head is so beautiful and so distinctly the work of a master, that it is difficult to conceive how he could have been willing to carve it for a foreign body. The head, moreover, is that of a man absorbed in thought, while the gestures are those of an orator or a teacher. He has read his text, holding his roll of papyrus in both hands, and now he has shifted both parts of the papyrus to his left hand [Fig. 5], while with his right he is emphasizing his remarks. It is here where the statue will be of chief interest

to the archæologist and student of ancient manners, for to say the least it is very unusual to find representations in art of an unrolled papyrus held in one hand.<sup>2</sup> The papyrus generally appears rolled up, *i. e.*, the book is closed, when held in one hand, or open, as here, but then it is held in both hands. That this should be so is natural, for ancient art is rarely concerned with the accidental, the momentary, unless it is characteristic of the person portrayed. A papyrus held in the fashion of the Vassar marble implies a momentary pause in the reading of the book, and is characteristic of a man only if he habitually discoursed from manuscripts. This point can not have escaped the Roman portrait sculptor, and if one believes that it was he who



HAND, SHOWING METHOD OF HOLDING PAPYRUS ROLL [FIG. 5]

placed the head³ on this marble, then he may have done so because of this very peculiarity, even though he carved the features in thoughtful repose.

The argument is hypothetical, but it may possibly lead to the identification of this magnificent head. [Figs. 1 and 6.] At present this Roman gentleman with his long, regular skull, his high forehead, and his large, deep-seated eyes, is unknown to us. The jaw shows strength, but not obstinancy, and the straight mouth surrounded by

<sup>&</sup>lt;sup>2</sup>The papyrus in art is discussed in a recent book by Th. Birth, *Die Buchrolle in der Kunst*. I have not yet been able to procure a copy of it. A friend who has made a specialty of these studies believes that the Vassar marble is unique.

<sup>3</sup>The head was broken and has been added again. It is impossible to tell whether prop-

<sup>&</sup>lt;sup>3</sup>The head was broken and has been added again. It is impossible to tell whether properly. The marble of which it is carved seems to be the same as that of the torso and both seem to be Pentelic.

<sup>4</sup>The head measures 16 in. around the temples, with a greatest width of 5 in.

generous lips, makes us wish to hear the words of wisdom which we imagine this man used to utter. We have here one more head of the many which make us admire the Romans, and wonder how Rome could so soon have started on the path which led to her own destruction.

Fine Roman portrait heads are not rare; every large museum possesses one or more, but there are few which can pride themselves in owning better heads than or even comparable to that of this unknown man in Vassar College.

EDMUND VON MACH.

Cambridge, Mass.

## **4 4 4**

#### PALESTINE EXPLORATION FUND

NE statement which was made last month on the authority of the Quarterly must be corrected with regret. said that, in addition to the excavation at Gezer, which is being carried on by our organization, Professor Reissner had begun work on the site of Samaria, and Professor Sellin on the site of Jericho. The former was understood to represent the Harvard Semitic Museum, which had received money for that purpose from an American. It now appears that no permit was obtained, and, consequently, nothing has been done by Professor Reissner, and my informant adds that no permit is hoped for. Therefore, Sebastiych stands with its protruding Herodian columns untouched. A few years ago another American undertook to raise for the purpose of excavating that site a large fund, sufficient to carry on the work for many years, but no permit could be obtained, and conditional subscriptions lapsed. This site is so large that it really should not be entered upon without a reasonable prospect of completing it, and I believe that an international movement will be necessary to accomplish the task.

It is unfortunate that the American excavation of the site of Samaria did not come to pass, and that Professor Reissner has accepted a three years' appointment from the Egyptian government, but an official newspaper at Damascus did print a statement that the permit had been granted. The New York gentleman, who has done so much for the Harvard Semitic Museum, is not to be blamed for getting discouraged and withdrawing his promise of furnishing funds for the excavation. There is also reason to think that so large a task may as well wait until some fuller coöperation, such as that suggested above, is established.

Meanwhile, it appears that very extensive finds are being made in obscure places. The discovery of artistic tombs in Marissa astonished every one because no one believed that such finely painted tombs existed in Palestine, but there they are, as fine as in Egypt. Lately a discovery of an extensive burial place has been made at Ain Samich, which lies about 6 hours northeast of Jerusalem, on the edge of the Jordan Valley, in about the latitude of Joppa. How such burials came to be there, what was the name of the place, in Bible times, why did so much pottery come to be made just there, no one now knows; but a large collection of objects showing early art will be on view in due time at the Harvard Semitic Museum. Underground Palestine becomes each year more of a mystery. In Egypt and in Crete, even in Babylonia, we seem to be able to look up and down the ancient remains with some certainty of chronology, but Palestine holds its secrets of the past most tenaciously. Yet the partial excavation of Lachish yielded many data which are recorded in the "Mound of Many Cities," and now the through exploration of Gezer is adding to our knowledge of the times from the Cave-dwellers to the Crusaders. Another generation will know how much more than we do if the work is now vigorously prosecuted.

In regard to Jericho it is said that Professor Sellin, who did excellent work at Megiddo and Taanach, worked but 3 weeks and then stopped, but we may hear more of him there, because a permit would scarcely be granted for so short a time, because the heat may have compelled him to wait until autumn, and because he may be dependent for funds on his reporting at Vienna the results of a preliminary survey. It is known that he discovered an ancient city wall and so had

every reason to follow up this clew.

But meanwhile, as usual for the last 40 years, only one organization is steadily at work, and that is our society, to which English and Americans contribute. The present permit runs two years, which is the usual term, but, as in previous cases it can undoubtedly be extended for a third year, if thorough work at Gezer should require it.

Speaking of the Harvard Semitic Museum, it is already well filled, but its curator, Prof. D. G. Lyon, has lately come home from spending a year in Jerusalem as head of the American School for Oriental Studies, and he brought new objects of interest, which will

soon be on exhibition.

In the last *Quarterly*, Mr. Macalister, our explorer, treated of the "Garden Tomb," which was purchased at a great price by parties in England, after it had been declared by General Gordon to be the tomb of our Lord. He depended on a special revelation. Mr. Macalister raises many doubts as to the "Skull Hill," itself, but more especially he declares that this tomb is not earlier than 300 A. D., that it is really two tombs let into one by breaking down the partition, that other neighboring tombs also bear the letters Alpha and Omega, that it was not closed by a stone, but by a bolted door, and that the so-called win-

dow is not a window at all. To this article the editor adds a note to the effect that, after conversation with the late Sir Charles Wilson about the tomb, General Gordon expressed regret that he had committed himself to the site. Here, then, good money has been wasted on a sentimental basis, and so much money has been lost to reverent, scientific study. In view of this baseless claim, as Mr. Macalister remarks, Protestants are not in a position to blame Catholics for their adherance to traditional sites which do not bear scientific investigation.

It is interesting, in view of the account of the swastika in Records OF THE PAST for August-September, to note that at least one instance of its occurrence in Palestine has been passed over by writers on the subject. In Excavations in Palestine, by Messrs. F. J. Bliss and R. A. S. Macalister, issued by our Fund in 1902, the swastika may be seen figured on plate 97. Mr. Macalister was describing burial caves which he had explored, and at a place in southern Palestine, called Khurbet Eb Ain, he noted this symbol. He speaks of it [page 225] as the first known instance of it in Palestine. I think that M. Clermont Ganneau has figured one in his Archaeological Researches in Palestine, but can not now verify the impression. It seems impossible as yet to use the swastika in Palestine or elsewhere as a note of time, except, of course, that it was a mark used before the Christian era. Any one who has walked through the Etruscan Museum at Rome or the National Museum at Athens must have seen numerous instances of the swastika. The theory of parallel development is coming into vogue, as appears from Prof. R. M. Burrows' recent volume, The Discoveries in Crete, and it is quite time that archæologists admit the possibility of independent developments of language, symbolic marks, and even writing.

> THEODORE F. WRIGHT, Honorary U. S. Secretary.

42 Quincy Street, Cambridge, Mass.

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### **EDITORIAL NOTES**

ROMAN COINS FROM SOUTH WILTS, ENGLAND.—A vessel containing 300 Roman silver coins and several silver rings of the period from 337 to 408 A. D., have been found at Grovely Wood, South Wilts, England.

ITALIAN ARCHÆOLOGICAL INSTITUTE AT ATHENS.—The Italian government is planning to found an archæological institute in Athens, modeled after the German archæological schools in Rome and Athens.

ORIGIN OF THE CRESCENT AS A MUHAMMADAN BADGE.—Prof. W. Ridgeway thinks that the Muhammadan crescent was taken from a pre-existing symbol, and the connection of the crescent with the moon was a later development. His line of argument is, that primitive peoples wore as amulets, claws, or tusks of the most powerful and dangerous animals. These, in time, were placed base to base, and the crescent form resulted, which was afterward adopted by the Muhammadans.

PUBLIC BATHS IN TIMGAD, ALGERIA.—In the old Roman city of Timgad there have already been discovered 6 public baths. Some of these are of very large dimensions, the largest ones being situated in the northern part outside of Trajan's Wall. One of these buildings, whose walls are 20 ft. high in places, measures 250 ft. by 210 ft. In the center of the building is the main hall, into which 4 main doors enter. Around this hall are ranged the other parts of the baths. One of these halls measures 80 ft. by 60 ft., and was originally very beautifully decorated. The general plan of all these baths is the same as that of those in Pompeii.

PAPYRI FROM A COPTIC CLOISTER IN UPPER EGYPT.—A large number of Greek and Coptic texts, dating from the VI century A. D., have recently been found in Upper Egypt, but not in the celebrated Oxyrhynchos district. Among them are gospel fragments, a sermon of Bishop Cyril of Jerusalem, who died in 386 A. D.; a document in the Nubian language, concerning canons of the Nicene Council, and 75 sheets, containing Sayings of the Lord in Coptic translation. The text of these Logia does not agree with any of the known Greek translations of these Sayings, and so probably represents a translation of a lost Greek collection.

AN ANCIENT "SCRIBBLER ON THE WALLS."—Judging from the inscriptions scribbled on old Roman walls and Egyptian monuments, it appears that travelers and sightseers of all historic periods, and probably earlier, have delighted in scrawling their names and various remarks on the walls in public places. An interesting instance of this is recorded by Mr. H. R. Hall, of the British Museum, who spent some time living in the tomb of Rameses IV. While there he noticed the following inscription in Greek: "I have come here, but I see nothing to admire at all—except the big stone." The Antiquarian [London] remarks on this, that the mental level of the "Scribbler on Walls" remains pretty constant in all ages.

FREE LECTURES AT PHILLIPS ACADEMY.—The Department of Archæology of Phillips Academy, Andover, Mass., announces the following free lectures, most of them illustrated, to be delivered in the lecture hall of the Archæology Building: October 31, Evolution and the Ascent of Man, by Prof. Warren K. Moorehead; November 31, Prehistoric Man in Europe, by Prof. Charles Peabody; December 5, Prehistoric Man in America, by Professor Moorehead; January 9, 1908, The Plains Indians, by Professor Moorehead; January 23, Mound-building Tribes, by Professor Moorehead; February 6, Prehistoric and Primitive Art, by Professor Peabody; February 20, The Cliff-dwellers, by Professor Moorehead; March 5, Central and South American Archæology, by Professor Peabody; March 19, The Pueblo Culture, by Professor Moorehead, and April 2, The American Indian in History and His Destiny, by Professor Moorehead.

NEW MEXICAN HISTORICAL DOCUMENTS.—The Historical Society of New Mexico is making an effort to raise funds for the purchase of a collection of historical documents in New Mexico, which extend from 1799 to 1846. "It is very full, not only of matters connected with the territory, but with a history of Mexico itself. It contains many documents relating to the first Mexican revolution and the empire under Iturbide. There are many papers signed by all of the Mexican governors during the time of the republic, and it is especially full of matter relating to the Revolution of 1837, when Governor Perez was killed. There are also a number of papers referring to the Texan invasion by the so-called Santa Fe expedition. Some of the later documents are signed by well-known citizens who survived to the present generation, like Diego Archuleta and José Pablo Gallegos. This collection has been kept in perfect order for 60 years." The necessity of placing these papers where they will be preserved is so great that it is to be hoped that Hon. L. Bradford Prince, the president of the Historical Society, and the main mover in this matter, will be successful in his effort to secure the funds needed.

HITTITE DISCOVERIES.—The University of Cornell Expedition made a number of interesting discoveries in the Hittite region of Asia Minor. The following quotation, from their first report, will give a general idea of the results of their first expedition to this region:

All the Hittite sites west of Kaisariye and Konia have been visited, and the inscriptions collated. Many new readings have been secured. At Boghaz-Keui, at the suggestion of the German excavators, the Hittite inscription, one of the largest known, and generally considered quite illegible, was studied, and as a result of two and a half days' work the greater part of the inscription was recovered. \* \* At Angora and Boghaz-Keui cuneiform tablets were also obtained and one Hittite seal.

At Giaour Kalesi, a well-known Hittite site, the palace was planned and \* \* Over fifty sites was found to be of a distinctly Mycenæan character. \* have been carefully examined and proved to be pre-classic, and of these a considerable proportion can be connected with an already known classic locality. The pre-classic site of Iconium, the most important city of southeastern Asia Minor, has been found. Much of the pottery found there is similar to the early types found at Troy, and a better site for excavation has not yet been seen by the \* Over three thousand potsherds have thus far been collected and studied. Most important are the various sherds of Mycenæan character showing connection with the Greek world of the time of Homer. In the light of the material collected it seems almost certain that some of the earlier theories of the people of Asia Minor and their connections must be modified or \* \* A marble idol of a type hitherto found only in the Greek islands in pre-Mycenæan settlements was secured at Angora. This link between the early inhabitants of Greece and of Asia Minor is of very great interest.

NEED FOR SMALL MUSEUMS.—While the necessity for great museums with vast scientific collections is universally recognized, the equally necessary small museum is often lost sight of. The large museums have their difficulties in arranging and displaying their collections to the best advantage, for they must cater to the public, which wants to see something new and strange, and from which they doubtless absorb some education. They must, also, consider the class of educated seekers after information who are not specialists, but who want to examine the main stepping stones by which the specialists have come to their conclusions. Lastly there is the specialist, who desires to see all the slightest variation in plant, animal, pottery decoration, form of skull, etc. Obviously only a few museums can aspire to meet the demands of this last class of people.

In most of the small towns scattered throughout this country there are one or two "Collectors," who have at least a nucleus for an instructive local museum. If these persons would receive the stimulus of interest and support from the better educated people of the community, and especially from the school boards, small museums would spring up all over the land. School museums and representative collections are now used in a few of the large cities, and some of the historical and archæological societies are furthering this cause. We agree with Prof. Franz Boas that every encouragement should be given to the establishment of school museums and small local museums. Surely a small museum at hand is better than a great museum afar off.

SIGNOR BONI'S INVESTIGATIONS OF THE COLUMN OF TRAJAN.—Signor Boni has felt that the common opinion as to the purpose of the column of Trajan was incorrect, therefore a little over a year ago he turned his attention especially to it. It had been supposed that the column was not a sepulcher, but was a monument to the height of a hill leveled to make room for the Forum Ulpium. This, Signor Boni considered, not in accord with the statements of ancient

writers, and it did not seem to him that the dedicatory inscription, upon which this belief was based, clearly pointed to such a purpose. On the southern side of the pedestal a loophole attracted his attention, and also the traces in the inner vestibule at the base of a door, which had been walled up and plastered over. On removing the plaster and part of the masonry, he found that the door led into a small atrium, turning to the right, where a second door was discovered. This led into a marble-walled chamber 10 ft. by 5 ft. by 6 ft. Within were the remains of a funeral table 21/2 ft. high and 4 ft. wide. Above were holes drilled so as to suggest that clamps going out of the wall had supported two urns on the table. A temple built by Hadrian in honor of his father and mother Trajan and Plotina stands near the column. As it was the custom to erect such temples near the burying-places of the persons thus commemorated, it seems reasonable to conclude that this was a sepulchral chamber. Signor Boni believes the inscription has been misunderstood. The column is exactly 100 ft. high. It seems incredible that any natural hill should have had such exact measurements. Furthermore, digging near by reveals Roman remains, proving that the Forum Ulpium was level long before the column was built.

EARLY HISTORY OF BABYLONIA.—The following brief summary of that region of Asia included in the Tigro-Euphrates valley, as it appears since the investigations of Mr. L. W. King is so concise and of such general interest to those who are not specialists in Assyriology that we quote it in full from the *Athenaeum* [London]:

The civilization of Babylonia was entirely Sumerian, and the Semites came there only as raiders or settlers. Sargon of Accad was probably the founder of the Semitic Empire in Babylonia, and flourished somewhere about 3200 B. C. Before his death his empire was already severely shaken, and he was besieged in his own capital. He did not, as is sometimes said, cross the Mediterranean, the sea referred to in the usually quoted text being now seen to be the Persian Gulf. But the Sumerian element in the nation was not so easily subjugated by the Semites, as has been thought, and after the settlement of the I Dynasty at Babylon, Sumerian kings established themselves in the "Sea-Land" or coast country, and waged successful war against their Semitic rivals. Already in the time of the II Dynasty or Ur, the Sumerian Dungi, the son of Ur-Engur, had succeeded to most of Sargon's possessions, sacked Babylon, and had carried off the spoils of the Semites to his own capital of Erech. The Semites again got the upper hand, and the I Dynasty was founded at Babylon, but Hammurabi's famous empire was probably brought to an inglorious end by the invasion of the Hittites from Cappadocia. During the turmoil that followed. Assyria. which was originally a Semitic colony from Babylon, and which Mr. King traces back to a time far earlier than the I Babylonian Dynasty, proclaimed her independence, and first Babylon, and then the "Sea-Land" were seized by the Kassites, who poured down upon them from the mountains of Elam. The king with whom Amenhotep IV of Egypt corresponded was one of the Kassite kings of the III Babylonian Dynasty, and flourished about 1380 B. C., while Meneptah was the Pharaoh of the Exodus, and his date was not much earlier than 1234 B. C.

